3M[™] Four-Wall Header

.100" × .100" Latch/Ejector, Straight, Compliant Pin

3000 Series



- Military (with 3M's 3518 and N3518 polarizing key) and centerbump polarization
- Optional ejector latches
- Optional polarizing posts
- · Mounting holes for securing header to board
- Dependable eye-of-the needle pin design
- Optional high-temperature insulator
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3Mconnectors.com for compliance information

Date Modified: April 3, 2013

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Physical

Insulation:

Material: Glass Filled Polyester (PBT) Glass Filled Polyester (PCT)

Flammability: UL 94V-0

Color: Gray (PBT), Black (PCT)

Contact:

Material: Copper Alloy

Plating:

Underplating: 100μ " [2.54μ m] Nickel Wiping Area: 30μ " [0.76μ m] Gold

Solder Tails: 100 μ" [2.54 μm] Tin Lead or 300u" [7.62 μm] Matte Tin (See Ordering Information)

Marking: 3M Logo, Part Identification Number and Orientation Triangle

Electrical

Current Rating: 1A

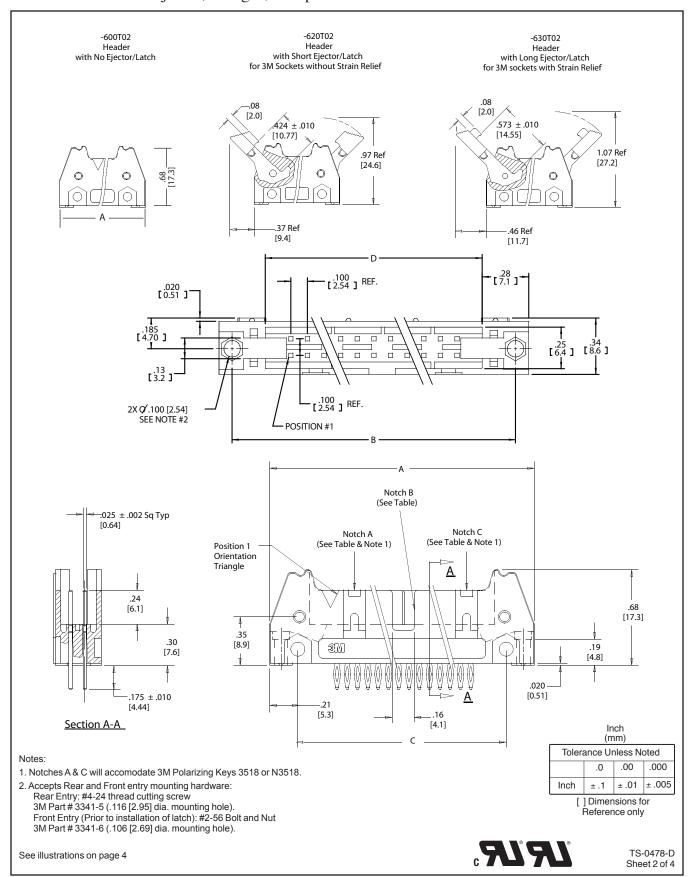
Insulation Resistance: $>1 \times 10^9 \,\Omega$ at $500 \,V_{DC}$ Withstanding Voltage: $1,000 \,V_{RMS}$ at Sea Level

Environmental

Temperature Rating: -55°C to +105°C

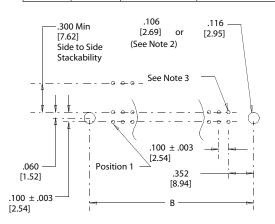
UL File No.: E68080

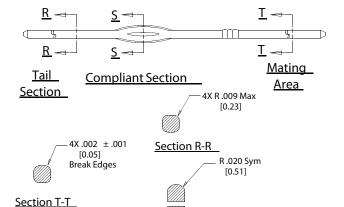
.100" × .100" Latch/Ejector, Straight, Compliant Pin



.100" × .100" Latch/Ejector, Straight, Compliant Pin

| Pin Qty | 3M Part Number | Dimensions | | | | Polarizing | Insertion platen |
|---------|-------------------|--------------|---------------|---------------|-------------|---------------------|------------------|
| | | Α | В | С | D | Notches Provided | 3442-00XX |
| 10 | 3793 | 1.26 (32.1) | 1.105 (28.07) | 0.865 (21.97) | 0.71 (18.0) | ВС | 3442-0048 |
| 14 | 3314 | 1.46 (37.2) | 1.305 (33.15) | 1.065 (27.05) | 0.91 (23.1) | ВС | 3442-0049 |
| 16 | 3408 | 1.56 (39.7) | 1.405 (35.69) | 1.165 (29.59) | 1.01 (25.6) | ABC | 3442-0050 |
| 20 | 3428 | 1.76 (44.8) | 1.605 (40.77) | 1.365 (34.67) | 1.21 (30.7) | ABC | 3442-0051 |
| 24 | 3627 | 1.96 (49.9) | 1.805 (45.85) | 1.565 (39.75) | 1.41 (35.8) | ABC | 3442-0052 |
| 26 | 3429 | 2.06 (52.4) | 1.905 (48.39) | 1.665 (42.29) | 1.51 (38.3) | ABC | 3442-0053 |
| 30 | 3440 | 2.26 (57.5) | 2.105 (53.47) | 1.865 (47.37) | 1.71 (43.4) | ABC | 3442-0054 |
| 34 | 3431 | 2.46 (62.6) | 2.305 (58.55) | 2.065 (52.45) | 1.91 (48.5) | ABC | 3442-0055 |
| 40 | 3432 | 2.76 (70.2) | 2.605 (66.17) | 2.365 (60.07) | 2.21 (56.1) | ABC | 3442-0056 |
| 50 | 3433 | 3.26 (82.9) | 3.105 (78.87) | 2.865 (72.77) | 2.71 (68.8) | ABC | 3442-0057 |
| 60 | 3372 | 3.76 (95.6) | 3.605 (91.57) | 3.365 (85.47) | 3.21 (81.5) | ABC | 3442-0058 |
| 64 | 3764 | 3.96 (100.7) | 3.805 (96.65) | 3.565 (90.55) | 3.41 (86.6) | ABC | 3442-0059 |





Recommended Mounting Hole Pattern

Note:

- 3. Listed below are the PCB hole sizes and tolerances recommended for use with 3M's compliant pin header. The insertion force is designed not to exceed 40 pounds per pin and the withdrawal force is not less than 10 pounds per pin.
- 4. Use of snap-in latch/ejectors in either short (N3XXX-650T02XX) or long (N3XXX-660T02XX) styles, installed or shipped separately. (-5 & -6 snap-in latches are dimensionally and functionally equivalent to -2 & -3 roll pin latches)

If ordering Snap-In style latches separately, please use the chart below

| in ordering oriap in otyle laterice departatory, produce dee the orian below | | | | | | | |
|--|-------------|------------|-------|--|--|--|--|
| | Short Latch | Long Latch | Color | | | | |
| High Temp (PPA) | 3505-30 | 3505-31 | Gray | | | | |
| High Temp (PPA) | N3505-30B | N3505-31B | Black | | | | |

Section S-S **Pin Cross Sections**

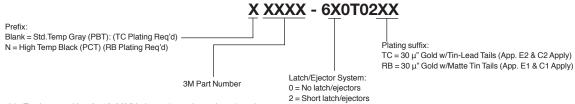
Hole Size for:

Preferred Drilled - \emptyset .0453 \pm .0005 Acceptable Drilled - ø.0453 +.0005 -.0010

After Etchback - ø.0460 Max After Plating - .ø040 ± .003 Board thickness - .093 to .150 Plating:

.001 Minimum Copper plating thickness .0003 Min Tin plating

Ordering Information



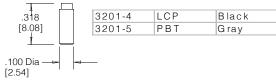
Assembly Equipment: Use 3442-00XX platen (see chart above) and appropriate commercial arbor press to press header into pc board.

3 = Long latch/ejectors 5 = Short, Snap-In Latch/Ejectors

6 = Long, Snap-In Latch/Ejectors

TS-0478-D Sheet 3 of 4 .100" × .100" Latch/Ejector, Straight, Compliant Pin

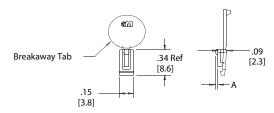




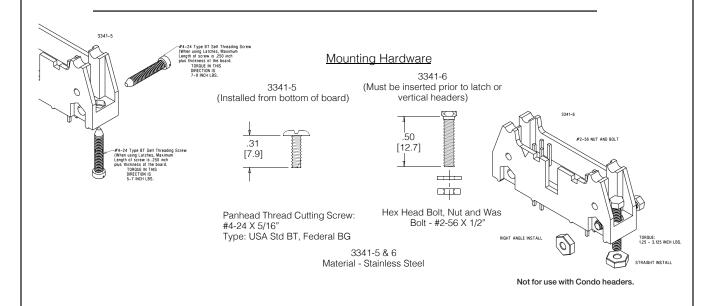
Note: Insert Post into one mounting hardware hole on bottom of header. Set post to protrude .115" [2.92]

Polarizing Keys

| | | | Dim A |
|-------|-----|-------|-------|
| N3518 | LCP | Black | .02 |
| 3518 | PBT | Gray | .02 |



Note: #2216 B/A Scotchweld can be used to adhere keys.



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6801 River Place Blvd. Austin, TX 78726-9000

www.3Mconnectors.com

1-800-225-5373

U.S.A.

3M Electronics Solutions Division